

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1-11. (Cancelled).

12. (New) A method of increasing the total oil content in a plant or a tissue, organ, part, cell or propagation material thereof, comprising

- transgenically expressing in a plant or a tissue, organ, part, cell or propagation material thereof a polypeptide, wherein the polypeptide has at least 90% identity at the amino acid level to SEQ ID NO: 2;
and
- selecting a transgenic plant, or a tissue, organ, part, cell or propagation material thereof in which the total oil content in the plant, tissue, organ, part, cell or propagation material thereof is increased as compared to the wild type.

13. (New) The method of claim 12, wherein the polypeptide is the polypeptide as set forth in SEQ ID NO: 2.

14. (New) The method of claim 12, wherein the plant is an oil crop.

15. (New) The method of claim 12, wherein the total oil content in a seed of the transgenic plant is increased.

16. (New) A transgenic expression cassette comprising a nucleic acid sequence under the control of a promoter which is functional in a plant or a tissue, organ, part or cell thereof, wherein the nucleic acid sequence is selected from the group consisting of

- a nucleic acid sequence having at least 90% identity to SEQ ID NO: 1; and
- a nucleic acid sequence encoding a polypeptide having at least 90% identity at the amino acid level to SEQ ID NO: 2;

and wherein expression of the nucleic acid sequence results in increased total oil content in the plant or the tissue, organ, part, cell or propagation material thereof.

17. (New) The transgenic expression cassette of claim 16, wherein the nucleic acid sequence is the nucleic acid sequence as set forth in SEQ ID NO: 1.
18. (New) The transgenic expression cassette of claim 16, wherein the nucleic acid sequence is a nucleic acid sequence encoding the polypeptide as set forth in SEQ ID NO: 2.
19. (New) The transgenic expression cassette of claim 16, wherein the promoter is a seed-specific promoter.
20. (New) A transgenic vector comprising the expression cassette of claim 16.
21. (New) A transgenic plant or tissue, organ, part, cell or propagation material thereof, comprising the expression cassette of claim 16.
22. (New) The transgenic plant of claim 21, wherein the plant is selected from the group consisting of *Borago officinalis*, *Brassica campestris*, *Brassica napus*, *Brassica rapa*, *Cannabis sativa*, *Carthamus tinctorius*, *Cocos nucifera*, *Crambe abyssinica*, *Cuphea* species, *Elaeis guineensis*, *Elaeis oleifera*, *Glycine max*, *Gossypium hirsutum*, *Gossypium barbadense*, *Gossypium herbaceum*, *Helianthus annuus*, *Linum usitatissimum*, *Oenothera biennis*, *Olea europaea*, *Oryza sativa*, *Ricinus communis*, *Sesamum indicum*, *Triticum* species, *Zea mays*, walnut, and almond.
23. (New) A method for the production of oils, fats, free fatty acids or derivatives thereof comprising extracting oils, fats, free fatty acids or derivatives thereof from a transgenic plant or tissue, organ, part, cell or propagation material thereof, wherein the transgenic plant or tissue, organ, part, cell or propagation material thereof is transformed with a transgenic expression cassette comprising a nucleic acid sequence under the control of a promoter which is functional in the plant or the tissue, organ, part or cell thereof, wherein the nucleic acid sequence is selected from the group consisting of

- a) a nucleic acid sequence having at least 90% identity to SEQ ID NO: 1; and
- b) a nucleic acid sequence encoding a polypeptide having at least 90% identity at the amino acid level to SEQ ID NO: 2;
and wherein expression of the nucleic acid sequence results in increased total oil content in the plant or the tissue, organ, part, cell or propagation material thereof as compared to a wild type.

24. (New) The method of claim 23, wherein the nucleic acid sequence is the nucleic acid sequence as set forth in SEQ ID NO: 1.

25. (New) The method of claim 23, wherein the nucleic acid sequence is a nucleic acid sequence encoding the polypeptide as set forth in SEQ ID NO: 2.

26. (New) A seed which is true breeding for an isolated nucleic acid molecule encoding a polypeptide having at least 90% identity at the amino acid level to SEQ ID NO: 2 wherein expression of the polypeptide results in increased total oil content in the seed as compared to a wild type seed.

27. (New) The seed of claim 26, wherein the polypeptide is the polypeptide as set forth in SEQ ID NO: 2.

28. (New) A method of producing a transgenic plant having increased total oil content as compared to a wild type variety of the plant, comprising the steps of:

- a) transforming a plant cell with an expression cassette comprising a nucleic acid sequence selected from the group consisting of
 - i) a nucleic acid sequence having at least 90% identity to SEQ ID NO: 1; and
 - ii) a nucleic acid sequence encoding a polypeptide having at least 90% identity at the amino acid level to SEQ ID NO: 2;
- b) generating transgenic plants from the plant cell;
- c) screening the transgenic plants for increased total oil content; and

- d) selecting transgenic plants that demonstrate increased total oil content as compared to the wild type.
- 29. (New) The method of claim 28, wherein the nucleic acid sequence is the nucleic acid sequence as set forth in SEQ ID NO: 1.
- 30. (New) The method of claim 28, wherein the nucleic acid sequence is a nucleic acid sequence encoding the polypeptide as set forth in SEQ ID NO: 2.